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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,054	04/14/2004	Eric Lawrence Barsness	ROC920030052US1	6100

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IBM CORPORATION
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EXAMINER	
NGUYEN, CINDY	

ART UNIT	PAPER NUMBER
2161	

NOTIFICATION DATE	DELIVERY MODE
11/18/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

rociplaw@us.ibm.com

Office Action Summary	Application No.	Applicant(s)	
	10/824,054	BARSNESS ET AL.	
	Examiner	Art Unit	
	CINDY NGUYEN	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-9,23-26 and 28-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-9, 23-26, 28-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is response to amendment filed 07/10/09.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 6-9, 23-26 and 28-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Naik et al. (US 20040205206, hereafter Naik).

Regarding claim 6, Naik discloses: A computer implemented method for managing access to the computer resources, the method comprising:

(a) defining a respective valuation of each of a plurality of work items to be processed by one or more data processing systems (i.e., ADRS (Application data recovery server) can define and register different types of task/work items, e.g., sequential backup, parallel backup, incremental backup, sequential recovery, other attributes/value of a task include task priority, task frequency, constraints on when a task may be performed, expected time to completion, range for the data size being accessed or stored, a list of resources needed to perform the task, etc. see paragraphs 0077, 0079, Naik);

(b)comparing the respective valuation of each respective said work item to a respective cost of accessing additional computer resources necessary to process the work item in a current time period, said additional computer resources being external to said one or more data processing systems (i.e., if set task definition returns success but requests for more resources… see paragraphs 0086-0088, 0111, Naik); and

(c) with respect to each said work item for which the respective valuation of each the work item exceeds the respective cost of accessing additional computer resources necessary to process the work item in the current time period, dynamically accessing additional computer

resources necessary to process the work item in the current time period (see paragraphs 0104, lines 2-11; 0109, Naik);

(d) with respect to each said work item for which the respective valuation of the work item does not exceed the respective cost of accessing additional computer resources necessary to process the work item in the current time period, deferring processing of the work item to a subsequent time period (see paragraphs 0088-0089, 0104, lines 2-11; 0109, Naik); and

(e) repeating said (b) through (d) in one or more subsequent time periods with respect to each said work item deferred by said (d) until each said work item has been processed (i.e., rescheduled/repeating the task see paragraphs 0089, 0104, lines 2-11; 0109, Naik);

Regarding claim 23, Thompson discloses A method of providing fee-based processing for programs in a processor system, whereby fees are based on utilization of computer resources for completing processing a program, the processor system including at least one processor (see paragraph 0029); a memory coupled to the at least one processor, and a scheduling manager residing in the memory (see paragraph 0029, lines 6), the method comprising the steps of:

(a) defining a respective valuation of each of a plurality of programs to be processed (i.e., ADRS (Application data recovery server) can define and register different types of task/work items, e.g., sequential backup, parallel backup, incremental backup, sequential recovery, other attributes/value of a task include task priority, task frequency, constraints on when a task may

be performed, expected time to completion, range for the data size being accessed or stored, a list of resources needed to perform the task, etc. see paragraphs 0077, 0079, Naik);

(b) comparing the respective valuation of each respective said program to a respective projected fee for utilization of computer resources to process said program in a current time (i.e., if set task definition returns success but requests for more resources… see paragraphs 0086-0088, 0111, Naik);

(c) with respect to each said program for which the respective valuation of the program exceeds the respective projected fee for utilization of computer resources to process the program in the current time period, dynamically accessing computer resources to be applied to a process the program in the current time period (see paragraphs 0074, 0088-0089, 0104, lines 2-11; 0109, Naik);

(d) with respect to each said program for which the respective valuation of the program does not exceed the respective projected fee for utilization of computer resources to process the program in the current time period, deferring processing of the program to a subsequent time period (see paragraphs 0088-0089, 0104, lines 2-11; 0109, Naik) and

(e) repeating said (b) through (d) in one or more subsequent time periods with respect to each said program deferred by said (d) until each said program has been processed (i.e., rescheduled/repeating the task see paragraphs 0089, 0104, lines 2-11; 0109, Naik); and

(f) assessing a fee for the dynamically accessed computer resources to be used (see paragraph 0109, Naik);.

Regarding claim 29, Naik discloses: An apparatus and a networks environment comprising:

at least one processor (see paragraph 0029, lines 6);

a memory coupled to the at least one processor (see paragraph 0029, lines 6); and

a scheduling manager residing in the memory and executable on the at least one processor, the scheduling manager dynamically managing access of each of a plurality of work items to additional computer resources external to said data processing apparatus for processing the respective work item, each said work item being a respective item of work performable by a data processing system and having a respective valuation (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik);

wherein said scheduling manager, in each of a plurality of time periods, compares the respective valuation of each unprocessed work item to a respective cost of accessing said additional computer resources to process the work item in the respective time period, and with respect to each said work item for which the respective valuation exceeds the respective cost of accessing the additional computer resources to process the work item in the respective time period, dynamically accesses the additional computer resources to process the work item in the respective time period (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik);

and

with respect to each said work item for which the respective valuation does not exceed the respective cost of accessing the additional computer resources to process the work item in the respective time period, defers processing of the work time to a subsequent time period (i.e., rescheduled/defers processing the task see paragraphs 0089, 0104, lines 2-11; 0109, Naik);

Regarding claim 33, A program product comprising:

a scheduling manager embodied as a plurality of computer-executable instructions recorded on computer-readable storage medium, wherein said scheduling manager, when executed by a computer system, causes the computer system to (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik):

(a) compare a respective defined valuation of each of a plurality of work items to be processed by the computer system to a respective cost of accessing additional computer resources necessary to process the work item in a current time period, said additional computer resources being external to said computer system (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik);

(b) with respect to each said work item for which the respective valuation of the work item exceeds the respective cost of accessing additional computer resources necessary to process the work item in the current time period, dynamically accesses additional computer

resources necessary to process the work item in the current time period (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik);

(c) with respect to each said work item for which the respective valuation of the work item does not exceed the respective cost of accessing additional computer resources necessary to process the work item in the current time period, defers processing of the work item to a subsequent time period (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik);and

(d) repeats said (a) through (c) in one or more subsequent time periods with respect to each said work item deferred by said (c) until each said work item has been processed (i.e., rescheduled/defers processing the task see paragraphs 0089, 0104, lines 2-11; 0109, Naik).

Regarding claim 37, all the limitation of this claim has been noted in rejection of claim 29, In addition, Naik discloses: a grid of computing resources (see paragraph 0045);

a request manager of the grid to receive requests of one or more customers for utilization of computing resources of the grid (i.e., periodic schedule for backup tasks over an optimal period…see paragraphs 0071, and generates a schedule to determine if additional resource capacity is required to server the new task in the presence of other tasks already defined and scheduled...0088-0089; 0104, lines 2-11; 0109, Naik);

one or more computer systems of a customer coupled to the request manager; the one computer system comprising one or more processors (fig. 2 and corresponding text, Naik).

With respect to claim 41, it is similar as claim 6 and 23 and is similarly rejected.

Regarding claims 7, 21, 24, 30, 34 and 38, all the limitations of these claims have been noted in the rejection of claims 6, 20 and 23, 29 and 37 above, respectively. In addition, Naik discloses: wherein the scheduling manager applies a valuation heuristic to each work item (see paragraph 0129, Naik).

Regarding claims 8, 22 and 25, 31, 35, 39 and 42, all the limitations of these claims have been noted in the rejection of claims 6, 20 and 24, 29, 33, 37 and 41 above, respectively. In addition, Naik discloses: further comprising applying a priority algorithm for preventing starvation of computer resources to those work items which have been delayed, whereby the processing of all the work items in a program is completed (see paragraph 0071, lines 20-31, Naik).

Claims 9, 32, 36 and 40. In addition, Naik discloses: comprising having the priority algorithm increase respective valuations of delayed work items so as to complete processing of each of the work items prior to or at a cut off processing date of the work item (see paragraphs 0091, 0105, 0111).

Regarding claim 26, all the limitations of this claim have been noted in the rejection of claim 25 above. In addition, Naik discloses: wherein the dynamic determination is based on

different attributes of the one or more work items forming at least part of a program (see paragraph 0075, Naik).

Regarding claim 28, all the limitations of this claim have been noted in the rejection of claim 6 above. In addition, Naik discloses: wherein said method is used in a networked environment including a grid of computing resources, and a request manager of the grid to receive requests of one or more customers for utilization of computing resources of the grid (see paragraphs 0075; 0079; 0056, Naik);

wherein said additional computer resources comprise computing resources of said grid of computing resources wherein one or more computer systems of a customer is coupled to the request manager and include one or more processors (see fig. 2 and corresponding text, paragraph 0079, Naik);

a memory coupled to at least the one processor (fig. 2, paragraph 0073); and,

a scheduling manager residing in the memory and executable by the at least the one processor (i.e., RMRS, see paragraph 0096, Naik).

Regarding claim 43, all the limitations of this claim have been noted in the rejection of claim 41 above. In addition, Naik discloses: wherein said method is used in a networked environment including a grid of computing resources (paragraph 0069, Naik), and a request manager of the grid to receive requests of one or more customers for utilization of computing resources of the grid (see paragraph 0071, Naik); wherein said additional computer resources

comprise computing resources of said grid of computing resources (see paragraphs 0071, 0079, Naik).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CINDY NGUYEN whose telephone number is (571)272-4025. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. N./
Examiner, Art Unit 2161

/Apu M Mofiz/

Supervisory Patent Examiner, Art Unit 2161